Reply to Office Action of July 24, 2006

## **REMARKS**

This paper is in response to the Advisory Action dated July 24, 2006. The paper further follows a Petition to Revive that was granted by the Office of Petitions on March 06, 2007. Applicants begin by expressing their appreciation to Examiner Bui for taking the time to conduct thoughtful and constructive interviews with Applicants' representative on September 14, 2006, April 10, 2007, April 17, 2007, and April 25, 2007. The central focus of the interviews was a discussion of the structure required for bi-stable members that are used according to various embodiments of the present invention to bias a foldable mobile station between open and folded positions. It was noted during the interview that independent Claims 1, 18, and 32 each recite a bi-stable member for biasing a foldable mobile station between open and folded positions wherein the bi-stable member includes a foldable portion having a substantially flattened transverse cross-section in the folded position and a substantially curved or C-shaped transverse cross-section in the open position.

During the September 14<sup>th</sup> discussion of the above limitation, the focus turned to the definition of the recited term "transverse" as set forth in the specification. It was noted, as discussed in greater detail below, that the claim term "transverse" is defined in the specification as substantially perpendicular to an axial direction. It was further noted that the specification defines "an axial direction" that is oriented generally in the direction of extension or folding of the bi-stable member (*i.e.*, generally parallel to the long axis of an extended mobile station such as that shown in Figure 3C). The interview concluded with Examiner Bui agreeing to reconsider the present rejections and the remarks provided below in view of the express definition of the term "transverse" as set forth in the present specification and reinforced in common parlance. Examiner Bui requested that this request be filed to document this decision.

Claims 1 – 34 are pending. The Final Official Action rejected Claims 1, 10-13, 18, 25-27, and 32-33 under 35 U.S.C. § 102(b) as anticipated by Japanese Publication No. 04277958 A assigned to Nakagawa Shigeo ("the Nakagawa reference"). The Official Action also rejects Claims 2-9, 14-17, 19, 21-24, 28-31, and 34 under 35 U.S.C. § 103(a) as being unpatentable over the Nakagawa reference in view of U.S. Patent No. 6,217,975 assigned to Rolatube Technology Limited ("the Rolatube patent"). Claim 20 is rejected under 35 U.S.C. § 103(a) as being

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unpatentable over the Nakagawa reference in view of U.S. Patent No. 4,847,818 assigned to Timex Corporation ("the Timex patent"). Applicants respectfully traverse these rejections for the reasons set forth below.

## Rejections Under 35 U.S.C. § 102

Claims 1, 10-13, 18, 25-27, and 32-33 have been rejected as anticipated by the Nakagawa reference. Independent Claims 1, 18, and 32 each require a bi-stable member for biasing a foldable mobile station between open and folded positions wherein the bi-stable member includes a foldable portion having a substantially flattened transverse cross-section in the folded position and a substantially curved or C-shaped transverse cross-section in the open position. As was noted during the interview summarized above, the present specification defines the term "transverse" (as used in the recited "transverse cross-section") in relation to an "axial" direction. The specification defines "an axial direction" that is oriented generally in the direction of extension or folding of the bi-stable member. Paragraph 33, page 8. Additionally, the specification defines a "transverse direction" that is "substantially perpendicular to the axial direction." *Id.* 

For illustration purposes, we have reproduced below Figures 4-4A and 5-5A to illustrate a bi-stable member structured in accordance with one embodiment of the claimed invention. It is noted that the Applicants' invention encompasses multiple additional embodiments that are not depicted here and Applicants' discussion of the figures set forth below is provided merely for illustration purposes and should not be construed as limiting.

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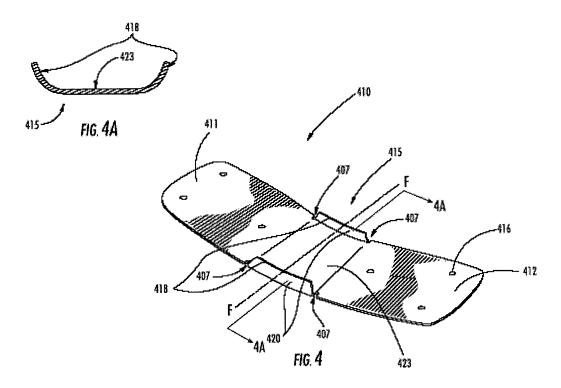
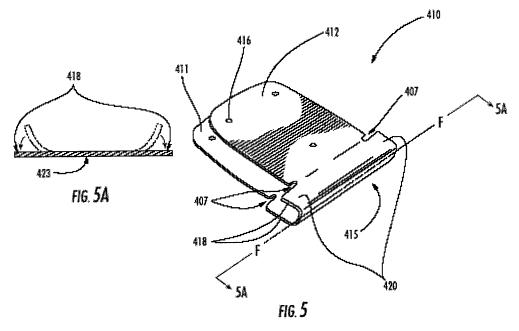


Figure 4 illustrates a bi-stable member in an open position according to one embodiment of the present invention. Figure 4A is a section view of the bi-stable member of Figure 4, taken in a <u>transverse</u> direction along section line 4A-4A.



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Figure 5 illustrates a bi-stable member in a folded position according to one embodiment of the present invention. Figure 5A is a section view of the bi-stable member of Figure 5, taken in a <u>transverse</u> direction along section line 5A-5A. As is apparent when comparing the illustrative embodiments of Figures 4-4A and 5-5A, bi-stable members according to various embodiments of the present invention include a foldable portion having <u>a substantially flattened transverse cross-section</u> in the folded position and <u>a substantially curved or C-shaped transverse cross-section</u> in the open position.

The Nakagawa reference discloses a bendable telephone that defines a bendable portion (4) having a transverse cross-section that is <u>substantially flat in the open and folded positions</u>. *See* Figures 4 and 5 of the Nakagawa reference. The Nakagawa reference generally, and Figures 4 and 5 in particular, do not teach or suggest a bi-stable member for biasing a foldable mobile station between open and folded positions wherein the bi-stable member includes a foldable portion having a substantially flattened transverse cross-section in the folded position and a substantially curved or C-shaped transverse cross-section in the open position as asserted on page 2 of the Official Action. The substantially flat, and not curved, nature of the transverse cross-section of the bendable portion (4) is illustrated by the flat, and not curved, appearance of the plurality of transversely extending lines disposed along the top surface of the bendable portion (4) of Figure 4 of the Nakagawa patent, which has been reproduced below.

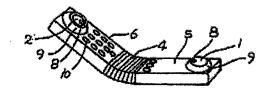


Fig 4

It is also apparent that were a cross-section taken of the bendable portion in an axial direction such a cross-section would indeed be curved in the open position.

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However, such axially curved cross-sections are known for mobile stations in the open position and are, thus, not relied upon here to distinguish the Nakagawa reference. Finally, Figures 1-6 of the Nakagawa reference do not teach or suggest that the bendable portion (4) of the depicted telephone biases the telephone between open and folded positions as expressly required by independent Claims 1, 18, and 32. For at least the reasons set forth above, it is respectfully submitted that the rejection for anticipation of independent Claims 1, 18, and 32 is overcome.

## Rejections Under 35 U.S.C. § 103

The Official Action rejects Claims 2-9, 14-17, 19, 21-24, 28-31, and 34 as obvious over the Nakagawa reference in view of the Rolatube patent. It is noted that independent Claim 1 was not similarly rejected as obvious over the Nakagawa reference in view of the Rolatube patent. The Rolatube patent discloses an extendible ribbon of resilient material that is configurable between coiled and extended states. The Rolatube ribbon is described regarding Figure 2 of the present application as a prior art bi-stable structure. See Figure 2; see also paragraph 32, pages 8-9. The Rolatube patent describes its extendible ribbon as a transportable and easily stored alternative to a telescoping or jointed member such as "a water pipe or electrical conduit" that is "supplied in the form of short lengths which are joined at the point of use." Column 3, lines 23-27. The Rolatube patent discloses that other telescoping or jointed systems may include "sewage pipes, drainage and irrigation pipes, drill bore linings for petroleum or gas or water wells, extendible handles and probes, retractable awnings or vehicle hoods, roll up ladders, actuators, aerial masts, camera mounts, microphone booms, lighting supports, conveyor belts, telecommunications or computer cable ducting, tent poles, temporary curved structures, surveyors poles and other measuring devices, stretchers and many others." Column 7, lines 39-48. Emphasis added.

The Office Action asserts that the Rotatube patent's disclosure of a telescoping ribbon potentially adapted for "telecommunications or computer cable ducting" is sufficient motivation for combining the Rolatube ribbon with the bendable telephone of the Nakagawa reference. Applicants respectfully disagree. As stated in MPEP §

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2143.01, "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." MPEP § 2143.01 (citing *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990)) (emphasis added). As has been held by the Board of Patent Appeals and Interferences, and noted in the MPEP, the mere fact that one skilled in the art could adapt the reference device to meet the terms of a claim is not by itself sufficient to support a finding of obviousness. The prior art must also provide a motivation or reason for one skilled in the art, without the benefit of Applicants' specification, to make the necessary modifications to the reference device. MPEP 2144.04(VI.)(C.) (citing Ex parte Chicago Rawhide Mfg. Co., 223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1984). The Court of Appeals for the Federal Circuit affirmed this principle when stating that "[c]ombining prior art references without evidence of ... a suggestion, teaching, or motivation simply takes the inventor's disclosure of a blueprint for piecing together the prior art to defeat patentability - the essence of hindsight." In re Dembiczak, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Although the evidence of a suggestion, teaching or motivation to combine the references commonly comes from the prior art references themselves, the suggestion, teaching or motivation can come from the knowledge of one of ordinary skill in the art or the nature of the problem to be solved. Id. The showing must be clear and particular and "[b]road conclusory statements regarding the teaching effort of multiple references, standing alone, are not 'evidence.'" Id.

The Rolatube patent does not disclose use of its extendable ribbon for connecting any portion of a mobile station, let alone for connecting first and second portions of a foldable mobile station. The mere disclosure of the Rolatube ribbon in connection with "telecommunications cable ducting" does not teach or suggest use of a bi-stable member for connecting and biasing first and second parts of a foldable mobile station between open and folded positions as recited in independent Claims 18, and 32. Rather, such a disclosure merely suggests a non-jointed solution to the problem of transporting, storing, and organizing jointed cable conduit or piping with the divide between ductwork on one hand and a hinge component on the other being substantial and impassible without

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hindsight analysis. In contrast to the Rolatube patent, the Nakagawa reference is directed to the problem of providing a bendable hinge for a telephone that allows the phone to be configured in a ring or folded shape and thereby worn on a user's wrist or perhaps on a belt. The problems solved by the Rolatube and Nakagawa references are distinct in view of the caselaw set forth by the Federal Circuit and, thus, without impermissible hindsight, Applicants respectfully submit that one of ordinary skill in the art would lack the requisite motivation or suggestion to combine the references.

## Conclusion

For at least the reasons set forth above, it is respectfully submitted that independent Claims 1, 18, and 32 are patentable over the cited references taken alone or in combination. Further, Claims 2-17, 19-31, and 33-34, which are dependent thereon are also patentable over the cited references taken alone or in combination. Based on the above amendments and remarks, it is submitted that the application is in condition for allowance.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

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